Release notes for ENDF/B Development n-052_Te_125 evaluation



April 26, 2017

- checkr Warnings:
 - 1. A previous error halted parsing of the current section MAT=5240, MF=1, MT=451 (1): Parsing stopped

ERROR(S) FOUND IN MAT=5240, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER 267 TO 330

- checkr Errors:
 - 1. A variable is outside the allowed ENDF range MAT=5240, MF=1, MT=451 (0): Variable range

ERROR(S) FOUND IN MAT=5240, MF= 1, MT=451
MOD = 1 OUT OF RANGE 0 - 0 RECORD NUMBER 267

2. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=2, MT=151 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 2, MT=151
SECTION 2/151 NOT IN DIRECTORY RECORD NUMBER 332

3. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=1 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 1
SECTION 3/ 1 NOT IN DIRECTORY RECORD NUMBER 751

4. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=2 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 2
SECTION 3/ 2 NOT IN DIRECTORY RECORD NUMBER 783

5. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=4 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 4
SECTION 3/ 4 NOT IN DIRECTORY RECORD NUMBER 812

6. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=16 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 16
SECTION 3/ 16 NOT IN DIRECTORY RECORD NUMBER 832

7. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=17 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 17 SECTION 3/ 17 NOT IN DIRECTORY

RECORD NUMBER 844

8. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 22 SECTION 3/ 22 NOT IN DIRECTORY

RECORD NUMBER 850

9. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=28 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 28 SECTION 3/ 28 NOT IN DIRECTORY

RECORD NUMBER 864

10. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 32 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 32 SECTION 3/ 32 NOT IN DIRECTORY

RECORD NUMBER 874

11. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=51 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 51 SECTION 3/ 51 NOT IN DIRECTORY

RECORD NUMBER 882

12. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=52 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 52 SECTION 3/ 52 NOT IN DIRECTORY

RECORD NUMBER 902

13. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=53 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 53 SECTION 3/ 53 NOT IN DIRECTORY

RECORD NUMBER 921

14. Missing a section in directory so your directory is messed up. This error will break everything else MAT = 5240, MF = 3, MT = 54 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 54 SECTION 3/ 54 NOT IN DIRECTORY

RECORD NUMBER 938

15. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=55 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 55 SECTION 3/ 55 NOT IN DIRECTORY

RECORD NUMBER 95

16. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 56 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 56 SECTION 3/ 56 NOT IN DIRECTORY

RECORD NUMBER 972

17. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 57 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 57 SECTION 3/ 57 NOT IN DIRECTORY

RECORD NUMBER 988

18. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 58 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 58 SECTION 3/ 58 NOT IN DIRECTORY

RECORD NUMBER 1004

19. Missing a section in directory so your directory is messed up. This error will break everything else

 $MAT = \tilde{5}240$, MF = 3, MT = 59 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 59 SECTION 3/ 59 NOT IN DIRECTORY

RECORD NUMBER 1019

20. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=60 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 60 SECTION 3/ 60 NOT IN DIRECTORY

RECORD NUMBER 1034

21. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=61 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 61 SECTION 3/ 61 NOT IN DIRECTORY

RECORD NUMBER 1048

22. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=62 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 62 SECTION 3/ 62 NOT IN DIRECTORY

RECORD NUMBER 1061

23. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=3, MT=63 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 63 SECTION 3/ 63 NOT IN DIRECTORY

RECORD NUMBER 1074

24. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 64 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 64 SECTION 3/ 64 NOT IN DIRECTORY

RECORD NUMBER 1086

25. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 65 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 65 SECTION 3/ 65 NOT IN DIRECTORY

RECORD NUMBER 1098

26. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 66 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 66 SECTION 3/ 66 NOT IN DIRECTORY

RECORD NUMBER 1110

27. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 67 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 67 SECTION 3/ 67 NOT IN DIRECTORY

RECORD NUMBER 1121

28. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT= 91 SECTION 3/ 91 NOT IN DIRECTORY

RECORD NUMBER 1132

29. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 102 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT=102 SECTION 3/102 NOT IN DIRECTORY

RECORD NUMBER 1142

30. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 103 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT=103 SECTION 3/103 NOT IN DIRECTORY

RECORD NUMBER 1167

31. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 104 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT=104 SECTION 3/104 NOT IN DIRECTORY

RECORD NUMBER 1183

32. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 105 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT=105 SECTION 3/105 NOT IN DIRECTORY

RECORD NUMBER 1195

33. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 3, MT = 107 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 3, MT=107 SECTION 3/107 NOT IN DIRECTORY

RECORD NUMBER 1207

34. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 4, MT = 2 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 2 SECTION 4/ 2 NOT IN DIRECTORY

RECORD NUMBER 1224

35. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=16 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 16 SECTION 4/ 16 NOT IN DIRECTORY

RECORD NUMBER 1418

36. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=17 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 17 SECTION 4/ 17 NOT IN DIRECTORY

RECORD NUMBER 1429

37. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=22 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 22 SECTION 4/ 22 NOT IN DIRECTORY

RECORD NUMBER 1440

38. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=28 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 28 SECTION 4/ 28 NOT IN DIRECTORY

RECORD NUMBER 1451

39. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=32 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 32 SECTION 4/ 32 NOT IN DIRECTORY

RECORD NUMBER 1462

40. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 4, MT = 51 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 51 SECTION 4/ 51 NOT IN DIRECTORY

RECORD NUMBER 1473

41. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 4, MT = 52 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 52 SECTION 4/ 52 NOT IN DIRECTORY

RECORD NUMBER 1501

42. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 4, MT = 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 53 SECTION 4/ 53 NOT IN DIRECTORY

RECORD NUMBER 1526

43. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 4, MT = 54 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 54 SECTION 4/ 54 NOT IN DIRECTORY

RECORD NUMBER 1551

44. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 4, MT = 55 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 55 SECTION 4/ 55 NOT IN DIRECTORY

RECORD NUMBER 1579

45. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=5240, MF=4, MT=56 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 56 SECTION 4/ 56 NOT IN DIRECTORY

RECORD NUMBER 1607

46. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=57 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 57

SECTION 4/57 NOT IN DIRECTORY

RECORD NUMBER 1632

47. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 4, MT = 58 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 58 SECTION 4/ 58 NOT IN DIRECTORY

RECORD NUMBER 1660

48. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 4, MT = 59 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 59 SECTION 4/ 59 NOT IN DIRECTORY

RECORD NUMBER 1688

49. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=60 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 60 SECTION 4/ 60 NOT IN DIRECTORY

RECORD NUMBER 1716

50. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=61 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 61 SECTION 4/ 61 NOT IN DIRECTORY

RECORD NUMBER 1743

51. Missing a section in directory so your directory is messed up. This error will break everything else $MAT=5240,\ MF=4,\ MT=62\ (0)$: Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 62 SECTION 4/ 62 NOT IN DIRECTORY

RECORD NUMBER 1768

52. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=63 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 63 SECTION 4/ 63 NOT IN DIRECTORY

RECORD NUMBER 1793

53. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=64 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 64 SECTION 4/ 64 NOT IN DIRECTORY

RECORD NUMBER 1816

54. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=65 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 65 SECTION 4/ 65 NOT IN DIRECTORY

RECORD NUMBER 1839

55. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=4, MT=66 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 66 SECTION 4/ 66 NOT IN DIRECTORY

RECORD NUMBER 1863

56. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 4, MT = 67 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 67 SECTION 4/ 67 NOT IN DIRECTORY

RECORD NUMBER 1887

57. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 4, MT = 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 4, MT= 91 SECTION 4/ 91 NOT IN DIRECTORY

RECORD NUMBER 1911

58. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 5, MT = 16 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 5, MT= 16 SECTION 5/ 16 NOT IN DIRECTORY

RECORD NUMBER 1936

59. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 5, MT = 17 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 5, MT= 17 SECTION 5/ 17 NOT IN DIRECTORY

RECORD NUMBER 2007

60. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 5, MT = 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 5, MT= 22 SECTION 5/ 22 NOT IN DIRECTORY

RECORD NUMBER 2033

61. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 5, MT = 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 5, MT= 28 SECTION 5/ 28 NOT IN DIRECTORY

RECORD NUMBER 2237

62. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5240, MF=5, MT=32 (0): Directory (b)

ERROR(S) FOUND IN MAT=5240, MF= 5, MT= 32

SECTION 5/ 32 NOT IN DIRECTORY

RECORD NUMBER 2334

63. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5240, MF = 5, MT = 91 (0): Directory (b)

• recent Warnings:

1. Statistical weight of certain L values were incorrect 0: RRR goof (a)

• fudge-4.0 Warnings:

1. Cross section does not match sum of linked reaction cross sections crossSectionSum label 0: total (Error # 0): CS Sum.

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.25%

2. Cross section does not match sum of linked reaction cross sections $crossSectionSum\ label\ 1:\ (z,n)\ (Error\ \#\ 0):\ CS\ Sum.$

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.14%

• fudge-4.0 Errors:

1. The spin statistical weights are off, indicating missing channels resonances / resolved / MultiLevel_BreitWigner (Error # 0): badSpinStatisticalWeights

WARNING: The spin statical weights for L=1 sums to 2.25, but should sum to 3.0. You have too few channels for r

2. Calculated and tabulated Q values disagree. reaction label 19: n[multiplicity:'2'] + Te124 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -6983998.400863647 eV vs -6.5768e6 eV!

3. Calculated and tabulated Q values disagree. reaction label 20: n[multiplicity:'3'] + Te123 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -16407969.07527161 eV vs -1.60057e7 eV!

4. Calculated and tabulated Q values disagree. reaction label 21: n + H1 + Sb124 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -9105907.682022095 eV vs -8699230. eV!

5. Calculated and tabulated Q values disagree. reaction label 22: n + H2 + Sb123 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -13348837.71076965 eV vs -1.28611e7 eV!

6. Calculated and tabulated Q values disagree. reaction label 23: $Te126 + gamma \ (Error \# 0)$: Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 8698664.697647095 eV vs 9118390. eV!

7. Calculated and tabulated Q values disagree. reaction label 24: n + He4 + Sn121 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -2658067.772033691 eV vs -2.2391e6 eV!

8. Calculated and tabulated Q values disagree. reaction label 25: H1 + Sb125-s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -399381.1745758057 eV vs 15462.9 eV!

9. Calculated and tabulated Q values disagree. reaction label 26: H2 + Sb124_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -6881341.581085205 eV vs -6389110. eV!

10. Calculated and tabulated Q values disagree. reaction label 27: H3 + Sb123_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -7091604.77015686 eV vs -6675960. eV!

11. Calculated and tabulated Q values disagree. reaction label 28: $He4 + Sn122_s$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 6155123.187240601 eV vs 6.5812e6 eV!

• njoy2012 Warnings:

1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

groupr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 16 only mf4/mf5 provided

2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

groupr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 17 only mf4/mf5 provided

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

groupr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 22 only mf4/mf5 provided

- 4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things! group:...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)
 - ---message from conver---cannot do complete particle production for mt= 28 only mf4/mf5 provided
- 5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

groupr...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)

- ---message from conver---cannot do complete particle production for mt= 32 only mf4/mf5 provided
- 6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things! groupr...compute self-shielded group-averaged cross-sections (5): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 91 only mf4/mf5 provided